

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

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North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-51070-1

Client Project/Site: EMD

For:

TRC Environmental Corp-Payne Firm

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Cincinnati, Ohio 45242

Attn: Curt Kugler

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Authorized for release by:

6/5/2015 11:00:33 AM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description  |
|-----------|--|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| *         | LCS or LCSD is outside acceptance limits.  |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|---|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery  |
| CFL            | Contains Free Liquid  |
| CNF            | Contains no Free Liquid   |
| DER            | Duplicate error ratio (normalized absolute difference)  |
| Dil Fac        | Dilution Factor   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision level concentration  |
| MDA            | Minimum detectable activity   |
| EDL            | Estimated Detection Limit   |
| MDC            | Minimum detectable concentration  |
| MDL            | Method Detection Limit  |
| ML             | Minimum Level (Dioxin)  |
| NC             | Not Calculated  |
| ND             | Not detected at the reporting limit (or MDL or EDL if shown)  |
| PQL            | Practical Quantitation Limit  |
| QC             | Quality Control   |
| RER            | Relative error ratio  |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)   |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)   |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)   |

# Case Narrative

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Job ID: 240-51070-1**

**Laboratory: TestAmerica Canton**

Narrative

## CASE NARRATIVE

**Client: TRC Environmental Corp-Payne Firm**

**Project: EMD**

**Report Number: 240-51070-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

### RECEIPT

The samples were received on 5/22/2015 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

### VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples EFFLUENT/052115 (240-51070-1) and TB01/052115 (240-51070-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/29/2015 and 06/02/2015.

The laboratory control sample (LCS) for 182892 recovered outside control limits for the following analyte: 1,4 Dioxane. 1,4 Dioxane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Associated sample: TB01/052115 (240-51070-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Sample EFFLUENT/052115 (240-51070-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 05/26/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Method Summary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

| Method    | Method Description                 | Protocol | Laboratory |
|-----------|------------------------------------|----------|------------|
| 8260B     | Volatile Organic Compounds (GC/MS) | SW846    | TAL CAN    |
| 8260B SIM | Volatile Organic Compounds (GC/MS) | SW846    | TAL CAN    |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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## Sample Summary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 240-51070-1   | EFFLUENT/052115  | Water  | 05/21/15 10:05 | 05/22/15 08:50 |
| 240-51070-2   | TB01/052115      | Water  | 05/21/15 00:00 | 05/22/15 08:50 |

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# Detection Summary

Client: TRC Environmental Corp-Payne Firm  
 Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: EFFLUENT/052115**

**Lab Sample ID: 240-51070-1**

| Analyte                   | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method    | Prep Type |
|---------------------------|--------|-----------|-----|------|------|---------|---|-----------|-----------|
| 1,4-Dioxane               | 40     |           | 2.0 | 0.44 | ug/L | 1       |   | 8260B SIM | Total/NA  |
| 1,1,1-Trichloroethane     | 1.5    |           | 1.0 | 0.44 | ug/L | 1       |   | 8260B     | Total/NA  |
| 1,1,2,2-Tetrachloroethane | 3.4    |           | 1.0 | 0.22 | ug/L | 1       |   | 8260B     | Total/NA  |
| 1,1,2-Trichloroethane     | 0.92   | J         | 1.0 | 0.24 | ug/L | 1       |   | 8260B     | Total/NA  |
| 1,1-Dichloroethane        | 4.0    |           | 1.0 | 0.30 | ug/L | 1       |   | 8260B     | Total/NA  |
| 1,2-Dichloroethane        | 7.2    |           | 1.0 | 0.23 | ug/L | 1       |   | 8260B     | Total/NA  |
| 1,2-Dichloroethene, Total | 0.52   | J         | 2.0 | 0.20 | ug/L | 1       |   | 8260B     | Total/NA  |
| Acetone                   | 12     |           | 10  | 0.94 | ug/L | 1       |   | 8260B     | Total/NA  |
| Bromoform                 | 1.4    |           | 1.0 | 0.56 | ug/L | 1       |   | 8260B     | Total/NA  |
| Carbon tetrachloride      | 0.91   | J         | 1.0 | 0.43 | ug/L | 1       |   | 8260B     | Total/NA  |
| Chloroform                | 9.1    |           | 1.0 | 0.25 | ug/L | 1       |   | 8260B     | Total/NA  |
| cis-1,2-Dichloroethene    | 0.52   | J         | 1.0 | 0.26 | ug/L | 1       |   | 8260B     | Total/NA  |
| Trichloroethene           | 0.24   | J         | 1.0 | 0.22 | ug/L | 1       |   | 8260B     | Total/NA  |

**Client Sample ID: TB01/052115**

**Lab Sample ID: 240-51070-2**

| Analyte      | Result | Qualifier | RL | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|--------------|--------|-----------|----|------|------|---------|---|--------|-----------|
| Acetone      | 6.0    | J         | 10 | 0.94 | ug/L | 1       |   | 8260B  | Total/NA  |
| Acetonitrile | 6.8    | J         | 20 | 4.0  | ug/L | 1       |   | 8260B  | Total/NA  |

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

# Client Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: EFFLUENT/052115**

Date Collected: 05/21/15 10:05

Date Received: 05/22/15 08:50

**Lab Sample ID: 240-51070-1**

Matrix: Water

**Method: 8260B SIM - Volatile Organic Compounds (GC/MS)**

| Analyte                      | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|------|------|---|----------|----------------|---------|
| 1,4-Dioxane                  | 40        |           | 2.0      | 0.44 | ug/L |   |          | 05/26/15 19:28 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 103       |           | 74 - 120 |      |      |   |          | 05/26/15 19:28 | 1       |

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                          | Result        | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------------------------|---------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane        | ND            |           | 1.0 | 0.28 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,1,1-Trichloroethane</b>     | <b>1.5</b>    |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,1,2,2-Tetrachloroethane</b> | <b>3.4</b>    |           | 1.0 | 0.22 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,1,2-Trichloroethane</b>     | <b>0.92 J</b> |           | 1.0 | 0.24 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,1-Dichloroethane</b>        | <b>4.0</b>    |           | 1.0 | 0.30 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 1,1-Dichloroethene               | ND            |           | 1.0 | 0.45 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 1,2,3-Trichloropropane           | ND            |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 1,2-Dibromo-3-Chloropropane      | ND            |           | 2.0 | 0.82 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,2-Dichloroethane</b>        | <b>7.2</b>    |           | 1.0 | 0.23 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>1,2-Dichloroethene, Total</b> | <b>0.52 J</b> |           | 2.0 | 0.20 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 1,2-Dichloropropane              | ND            |           | 1.0 | 0.25 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 1,4-Dioxane                      | ND            |           | 50  | 40   | ug/L |   |          | 06/02/15 02:28 | 1       |
| 2-Butanone                       | ND            |           | 10  | 0.53 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 2-Hexanone                       | ND            |           | 10  | 0.48 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 3-Chloro-1-propene               | ND            |           | 2.0 | 0.84 | ug/L |   |          | 06/02/15 02:28 | 1       |
| 4-Methyl-2-pentanone (MIBK)      | ND            |           | 10  | 0.99 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>Acetone</b>                   | <b>12</b>     |           | 10  | 0.94 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Acetonitrile                     | ND            |           | 20  | 4.0  | ug/L |   |          | 06/02/15 02:28 | 1       |
| Acrolein                         | ND            |           | 20  | 4.5  | ug/L |   |          | 06/02/15 02:28 | 1       |
| Acrylonitrile                    | ND            |           | 20  | 6.3  | ug/L |   |          | 06/02/15 02:28 | 1       |
| Benzene                          | ND            |           | 1.0 | 0.35 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Bromodichloromethane             | ND            |           | 1.0 | 0.29 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>Bromoform</b>                 | <b>1.4</b>    |           | 1.0 | 0.56 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Bromomethane                     | ND            |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Carbon disulfide                 | ND            |           | 1.0 | 0.38 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>Carbon tetrachloride</b>      | <b>0.91 J</b> |           | 1.0 | 0.43 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Chlorobenzene                    | ND            |           | 1.0 | 0.25 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Chloroethane                     | ND            |           | 1.0 | 0.32 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>Chloroform</b>                | <b>9.1</b>    |           | 1.0 | 0.25 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Chloromethane                    | ND            |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Chloroprene                      | ND            |           | 2.0 | 0.26 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>cis-1,2-Dichloroethene</b>    | <b>0.52 J</b> |           | 1.0 | 0.26 | ug/L |   |          | 06/02/15 02:28 | 1       |
| cis-1,3-Dichloropropene          | ND            |           | 1.0 | 0.46 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Dibromochloromethane             | ND            |           | 1.0 | 0.43 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Dibromomethane                   | ND            |           | 1.0 | 0.42 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Dichlorodifluoromethane          | ND            |           | 1.0 | 0.32 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Ethyl methacrylate               | ND            |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Ethylbenzene                     | ND            |           | 1.0 | 0.25 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Ethylene Dibromide               | ND            |           | 1.0 | 0.32 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Iodomethane                      | ND            |           | 1.0 | 0.42 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Isobutanol                       | ND            |           | 50  | 12   | ug/L |   |          | 06/02/15 02:28 | 1       |
| Methacrylonitrile                | ND            |           | 10  | 2.5  | ug/L |   |          | 06/02/15 02:28 | 1       |
| Methyl methacrylate              | ND            |           | 2.0 | 0.28 | ug/L |   |          | 06/02/15 02:28 | 1       |

TestAmerica Canton

# Client Sample Results

Client: TRC Environmental Corp-Payne Firm  
 Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: EFFLUENT/052115**

**Date Collected: 05/21/15 10:05**

**Date Received: 05/22/15 08:50**

**Lab Sample ID: 240-51070-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte                      | Result        | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|---------------|-----------|----------|------|------|---|----------|----------------|---------|
| Methylene Chloride           | ND            |           | 1.0      | 0.33 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Propionitrile                | ND            |           | 10       | 2.0  | ug/L |   |          | 06/02/15 02:28 | 1       |
| Styrene                      | ND            |           | 1.0      | 0.45 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Tetrachloroethene            | ND            |           | 1.0      | 0.31 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Toluene                      | ND            |           | 1.0      | 0.23 | ug/L |   |          | 06/02/15 02:28 | 1       |
| trans-1,2-Dichloroethene     | ND            |           | 1.0      | 0.30 | ug/L |   |          | 06/02/15 02:28 | 1       |
| trans-1,3-Dichloropropene    | ND            |           | 1.0      | 0.56 | ug/L |   |          | 06/02/15 02:28 | 1       |
| trans-1,4-Dichloro-2-butene  | ND            |           | 1.0      | 0.55 | ug/L |   |          | 06/02/15 02:28 | 1       |
| <b>Trichloroethene</b>       | <b>0.24 J</b> |           | 1.0      | 0.22 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Trichlorofluoromethane       | ND            |           | 1.0      | 0.49 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Vinyl acetate                | ND            |           | 2.0      | 0.41 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Vinyl chloride               | ND            |           | 1.0      | 0.29 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Xylenes, Total               | ND            |           | 2.0      | 0.52 | ug/L |   |          | 06/02/15 02:28 | 1       |
| Surrogate                    | %Recovery     | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 103           |           | 63 - 129 |      |      |   |          | 06/02/15 02:28 | 1       |
| 4-Bromofluorobenzene (Surr)  | 85            |           | 66 - 120 |      |      |   |          | 06/02/15 02:28 | 1       |
| Dibromofluoromethane (Surr)  | 98            |           | 75 - 121 |      |      |   |          | 06/02/15 02:28 | 1       |
| Toluene-d8 (Surr)            | 95            |           | 74 - 120 |      |      |   |          | 06/02/15 02:28 | 1       |

# Client Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: TB01/052115**

**Date Collected: 05/21/15 00:00**

**Date Received: 05/22/15 08:50**

**Lab Sample ID: 240-51070-2**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte                     | Result       | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------------|-----------|-----|------|------|---|----------|----------------|---------|
| 1,1,1,2-Tetrachloroethane   | ND           |           | 1.0 | 0.28 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,1,1-Trichloroethane       | ND           |           | 1.0 | 0.44 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND           |           | 1.0 | 0.22 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,1,2-Trichloroethane       | ND           |           | 1.0 | 0.24 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,1-Dichloroethane          | ND           |           | 1.0 | 0.30 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,1-Dichloroethene          | ND           |           | 1.0 | 0.45 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,2,3-Trichloropropane      | ND           |           | 1.0 | 0.44 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND           |           | 2.0 | 0.82 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,2-Dichloroethane          | ND           |           | 1.0 | 0.23 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,2-Dichloroethene, Total   | ND           |           | 2.0 | 0.20 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,2-Dichloropropane         | ND           |           | 1.0 | 0.25 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 1,4-Dioxane                 | ND *         |           | 50  | 40   | ug/L |   |          | 05/29/15 19:39 | 1       |
| 2-Butanone                  | ND           |           | 10  | 0.53 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 2-Hexanone                  | ND           |           | 10  | 0.48 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 3-Chloro-1-propene          | ND           |           | 2.0 | 0.84 | ug/L |   |          | 05/29/15 19:39 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND           |           | 10  | 0.99 | ug/L |   |          | 05/29/15 19:39 | 1       |
| <b>Acetone</b>              | <b>6.0 J</b> |           | 10  | 0.94 | ug/L |   |          | 05/29/15 19:39 | 1       |
| <b>Acetonitrile</b>         | <b>6.8 J</b> |           | 20  | 4.0  | ug/L |   |          | 05/29/15 19:39 | 1       |
| Acrolein                    | ND           |           | 20  | 4.5  | ug/L |   |          | 05/29/15 19:39 | 1       |
| Acrylonitrile               | ND           |           | 20  | 6.3  | ug/L |   |          | 05/29/15 19:39 | 1       |
| Benzene                     | ND           |           | 1.0 | 0.35 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Bromodichloromethane        | ND           |           | 1.0 | 0.29 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Bromoform                   | ND           |           | 1.0 | 0.56 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Bromomethane                | ND           |           | 1.0 | 0.44 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Carbon disulfide            | ND           |           | 1.0 | 0.38 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Carbon tetrachloride        | ND           |           | 1.0 | 0.43 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Chlorobenzene               | ND           |           | 1.0 | 0.25 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Chloroethane                | ND           |           | 1.0 | 0.32 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Chloroform                  | ND           |           | 1.0 | 0.25 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Chloromethane               | ND           |           | 1.0 | 0.44 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Chloroprene                 | ND           |           | 2.0 | 0.26 | ug/L |   |          | 05/29/15 19:39 | 1       |
| cis-1,2-Dichloroethene      | ND           |           | 1.0 | 0.26 | ug/L |   |          | 05/29/15 19:39 | 1       |
| cis-1,3-Dichloropropene     | ND           |           | 1.0 | 0.46 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Dibromochloromethane        | ND           |           | 1.0 | 0.43 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Dibromomethane              | ND           |           | 1.0 | 0.42 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Dichlorodifluoromethane     | ND           |           | 1.0 | 0.32 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Ethyl methacrylate          | ND           |           | 1.0 | 0.44 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Ethylbenzene                | ND           |           | 1.0 | 0.25 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Ethylene Dibromide          | ND           |           | 1.0 | 0.32 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Iodomethane                 | ND           |           | 1.0 | 0.42 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Isobutanol                  | ND           |           | 50  | 12   | ug/L |   |          | 05/29/15 19:39 | 1       |
| Methacrylonitrile           | ND           |           | 10  | 2.5  | ug/L |   |          | 05/29/15 19:39 | 1       |
| Methyl methacrylate         | ND           |           | 2.0 | 0.28 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Methylene Chloride          | ND           |           | 1.0 | 0.33 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Propionitrile               | ND           |           | 10  | 2.0  | ug/L |   |          | 05/29/15 19:39 | 1       |
| Styrene                     | ND           |           | 1.0 | 0.45 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Tetrachloroethene           | ND           |           | 1.0 | 0.31 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Toluene                     | ND           |           | 1.0 | 0.23 | ug/L |   |          | 05/29/15 19:39 | 1       |
| trans-1,2-Dichloroethene    | ND           |           | 1.0 | 0.30 | ug/L |   |          | 05/29/15 19:39 | 1       |

TestAmerica Canton

# Client Sample Results

Client: TRC Environmental Corp-Payne Firm  
 Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: TB01/052115**

**Lab Sample ID: 240-51070-2**

Date Collected: 05/21/15 00:00

Matrix: Water

Date Received: 05/22/15 08:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte                      | Result    | Qualifier | RL       | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|------|------|---|----------|----------------|---------|
| trans-1,3-Dichloropropene    | ND        |           | 1.0      | 0.56 | ug/L |   |          | 05/29/15 19:39 | 1       |
| trans-1,4-Dichloro-2-butene  | ND        |           | 1.0      | 0.55 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Trichloroethene              | ND        |           | 1.0      | 0.22 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Trichlorofluoromethane       | ND        |           | 1.0      | 0.49 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Vinyl acetate                | ND        |           | 2.0      | 0.41 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Vinyl chloride               | ND        |           | 1.0      | 0.29 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Xylenes, Total               | ND        |           | 2.0      | 0.52 | ug/L |   |          | 05/29/15 19:39 | 1       |
| Surrogate                    | %Recovery | Qualifier | Limits   |      |      |   | Prepared | Analyzed       | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 102       |           | 63 - 129 |      |      |   |          | 05/29/15 19:39 | 1       |
| 4-Bromofluorobenzene (Surr)  | 94        |           | 66 - 120 |      |      |   |          | 05/29/15 19:39 | 1       |
| Dibromofluoromethane (Surr)  | 99        |           | 75 - 121 |      |      |   |          | 05/29/15 19:39 | 1       |
| Toluene-d8 (Surr)            | 102       |           | 74 - 120 |      |      |   |          | 05/29/15 19:39 | 1       |

# Surrogate Summary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                  |                 |
|------------------|--------------------|--|-----------------|------------------|-----------------|
|                  |                    | 12DCE<br>(63-129)                              | BFB<br>(66-120) | DBFM<br>(75-121) | TOL<br>(74-120) |
| 240-51070-1      | EFFLUENT/052115    | 103  | 85              | 98               | 95              |
| 240-51070-2      | TB01/052115        | 102  | 94              | 99               | 102             |
| LCS 240-182892/4 | Lab Control Sample | 89   | 105             | 90               | 103             |
| LCS 240-183189/4 | Lab Control Sample | 96   | 96              | 95               | 98              |
| MB 240-182892/6  | Method Blank       | 97   | 95              | 94               | 103             |
| MB 240-183189/6  | Method Blank       | 103  | 88              | 98               | 96              |

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)  
TOL = Toluene-d8 (Surr)

## Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |  |  |  |
|------------------|--------------------|--|--|--|--|
|                  |                    | 12DCE<br>(74-120)                              |  |  |  |
| 240-51070-1      | EFFLUENT/052115    | 103  |  |  |  |
| LCS 240-182323/4 | Lab Control Sample | 100  |  |  |  |
| MB 240-182323/5  | Method Blank       | 99   |  |  |  |

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-182892/6**

**Matrix: Water**

**Analysis Batch: 182892**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

| Analyte                     | MB Result | MB Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------------|----------|---------|
| 1,1,1,2-Tetrachloroethane   | ND        |              | 1.0 | 0.28 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 1.0 | 0.44 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 1.0 | 0.22 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 1.0 | 0.24 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,1-Dichloroethane          | ND        |              | 1.0 | 0.30 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,1-Dichloroethene          | ND        |              | 1.0 | 0.45 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,2,3-Trichloropropane      | ND        |              | 1.0 | 0.44 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,2-Dibromo-3-Chloropropane | ND        |              | 2.0 | 0.82 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,2-Dichloroethane          | ND        |              | 1.0 | 0.23 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,2-Dichloroethene, Total   | ND        |              | 2.0 | 0.20 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,2-Dichloropropane         | ND        |              | 1.0 | 0.25 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 1,4-Dioxane                 | ND        |              | 50  | 40   | ug/L |   | 05/29/15 13:18 |          | 1       |
| 2-Butanone                  | ND        |              | 10  | 0.53 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 2-Hexanone                  | ND        |              | 10  | 0.48 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 3-Chloro-1-propene          | ND        |              | 2.0 | 0.84 | ug/L |   | 05/29/15 13:18 |          | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND        |              | 10  | 0.99 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Acetone                     | ND        |              | 10  | 0.94 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Acetonitrile                | ND        |              | 20  | 4.0  | ug/L |   | 05/29/15 13:18 |          | 1       |
| Acrolein                    | ND        |              | 20  | 4.5  | ug/L |   | 05/29/15 13:18 |          | 1       |
| Acrylonitrile               | ND        |              | 20  | 6.3  | ug/L |   | 05/29/15 13:18 |          | 1       |
| Benzene                     | ND        |              | 1.0 | 0.35 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Bromodichloromethane        | ND        |              | 1.0 | 0.29 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Bromoform                   | ND        |              | 1.0 | 0.56 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Bromomethane                | ND        |              | 1.0 | 0.44 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Carbon disulfide            | ND        |              | 1.0 | 0.38 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Carbon tetrachloride        | ND        |              | 1.0 | 0.43 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Chlorobenzene               | ND        |              | 1.0 | 0.25 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Chloroethane                | ND        |              | 1.0 | 0.32 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Chloroform                  | ND        |              | 1.0 | 0.25 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Chloromethane               | ND        |              | 1.0 | 0.44 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Chloroprene                 | ND        |              | 2.0 | 0.26 | ug/L |   | 05/29/15 13:18 |          | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 1.0 | 0.26 | ug/L |   | 05/29/15 13:18 |          | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 1.0 | 0.46 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Dibromochloromethane        | ND        |              | 1.0 | 0.43 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Dibromomethane              | ND        |              | 1.0 | 0.42 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Dichlorodifluoromethane     | ND        |              | 1.0 | 0.32 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Ethyl methacrylate          | ND        |              | 1.0 | 0.44 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Ethylbenzene                | ND        |              | 1.0 | 0.25 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Ethylene Dibromide          | ND        |              | 1.0 | 0.32 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Iodomethane                 | ND        |              | 1.0 | 0.42 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Isobutanol                  | ND        |              | 50  | 12   | ug/L |   | 05/29/15 13:18 |          | 1       |
| Methacrylonitrile           | ND        |              | 10  | 2.5  | ug/L |   | 05/29/15 13:18 |          | 1       |
| Methyl methacrylate         | ND        |              | 2.0 | 0.28 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Methylene Chloride          | ND        |              | 1.0 | 0.33 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Propionitrile               | ND        |              | 10  | 2.0  | ug/L |   | 05/29/15 13:18 |          | 1       |
| Styrene                     | ND        |              | 1.0 | 0.45 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Tetrachloroethene           | ND        |              | 1.0 | 0.31 | ug/L |   | 05/29/15 13:18 |          | 1       |
| Toluene                     | ND        |              | 1.0 | 0.23 | ug/L |   | 05/29/15 13:18 |          | 1       |

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-182892/6**

**Matrix: Water**

**Analysis Batch: 182892**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

| Analyte                      | MB        |           | D        | MB       |      | Dil Fac |   |
|------------------------------|-----------|-----------|----------|----------|------|---------|---|
|                              | Result    | Qualifier |          | RL       | MDL  |         |   |
| trans-1,2-Dichloroethene     | ND        |           |          | 1.0      | 0.30 | ug/L    | 1 |
| trans-1,3-Dichloropropene    | ND        |           |          | 1.0      | 0.56 | ug/L    | 1 |
| trans-1,4-Dichloro-2-butene  | ND        |           |          | 1.0      | 0.55 | ug/L    | 1 |
| Trichloroethylene            | ND        |           |          | 1.0      | 0.22 | ug/L    | 1 |
| Trichlorofluoromethane       | ND        |           |          | 1.0      | 0.49 | ug/L    | 1 |
| Vinyl acetate                | ND        |           |          | 2.0      | 0.41 | ug/L    | 1 |
| Vinyl chloride               | ND        |           |          | 1.0      | 0.29 | ug/L    | 1 |
| Xylenes, Total               | ND        |           |          | 2.0      | 0.52 | ug/L    | 1 |
| Surrogate                    | MB        |           | Prepared | MB       |      | Dil Fac |   |
|                              | %Recovery | Qualifier |          | Limits   |      |         |   |
| 1,2-Dichloroethane-d4 (Surr) | 97        |           |          | 63 - 129 |      | 1       |   |
| 4-Bromofluorobenzene (Surr)  | 95        |           |          | 66 - 120 |      | 1       |   |
| Dibromofluoromethane (Surr)  | 94        |           |          | 75 - 121 |      | 1       |   |
| Toluene-d8 (Surr)            | 103       |           |          | 74 - 120 |      | 1       |   |

**Lab Sample ID: LCS 240-182892/4**

**Matrix: Water**

**Analysis Batch: 182892**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

| Analyte                     | Spike Added | LCS    |           | D    | %Rec | Limits   |
|-----------------------------|-------------|--------|-----------|------|------|----------|
|                             |             | Result | Qualifier |      |      |          |
| 1,1,1,2-Tetrachloroethane   | 10.0        | 9.64   |           | ug/L | 96   | 72 - 120 |
| 1,1,1-Trichloroethane       | 10.0        | 8.79   |           | ug/L | 88   | 74 - 120 |
| 1,1,2,2-Tetrachloroethane   | 10.0        | 9.84   |           | ug/L | 98   | 68 - 120 |
| 1,1,2-Trichloroethane       | 10.0        | 9.54   |           | ug/L | 95   | 80 - 120 |
| 1,1-Dichloroethane          | 10.0        | 8.61   |           | ug/L | 86   | 80 - 120 |
| 1,1-Dichloroethylene        | 10.0        | 8.36   |           | ug/L | 84   | 78 - 131 |
| 1,2,3-Trichloropropane      | 10.0        | 9.89   |           | ug/L | 99   | 73 - 129 |
| 1,2-Dibromo-3-Chloropropane | 10.0        | 8.56   |           | ug/L | 86   | 42 - 136 |
| 1,2-Dichloroethane          | 10.0        | 8.46   |           | ug/L | 85   | 71 - 127 |
| 1,2-Dichloroethylene, Total | 20.0        | 17.0   |           | ug/L | 85   | 80 - 120 |
| 1,2-Dichloropropane         | 10.0        | 8.82   |           | ug/L | 88   | 80 - 120 |
| 1,4-Dioxane                 | 200         | 98.4 * |           | ug/L | 49   | 50 - 150 |
| 2-Butanone                  | 20.0        | 15.4   |           | ug/L | 77   | 60 - 126 |
| 2-Hexanone                  | 20.0        | 19.5   |           | ug/L | 98   | 55 - 133 |
| 3-Chloro-1-propene          | 10.0        | 7.68   |           | ug/L | 77   | 40 - 160 |
| 4-Methyl-2-pentanone (MIBK) | 20.0        | 16.8   |           | ug/L | 84   | 63 - 128 |
| Acetone                     | 20.0        | 15.4   |           | ug/L | 77   | 43 - 136 |
| Acrolein                    | 50.0        | 42.5   |           | ug/L | 85   | 51 - 170 |
| Acrylonitrile               | 100         | 79.8   |           | ug/L | 80   | 66 - 132 |
| Benzene                     | 10.0        | 8.39   |           | ug/L | 84   | 80 - 120 |
| Bromodichloromethane        | 10.0        | 8.57   |           | ug/L | 86   | 72 - 121 |
| Bromoform                   | 10.0        | 7.90   |           | ug/L | 79   | 40 - 131 |
| Bromomethane                | 10.0        | 8.91   |           | ug/L | 89   | 11 - 185 |
| Carbon disulfide            | 10.0        | 8.48   |           | ug/L | 85   | 62 - 142 |
| Carbon tetrachloride        | 10.0        | 8.78   |           | ug/L | 88   | 66 - 128 |
| Chlorobenzene               | 10.0        | 9.49   |           | ug/L | 95   | 80 - 120 |
| Chloroethane                | 10.0        | 8.46   |           | ug/L | 85   | 25 - 153 |
| Chloroform                  | 10.0        | 8.42   |           | ug/L | 84   | 79 - 120 |

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-182892/4**

**Matrix: Water**

**Analysis Batch: 182892**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

| Analyte                      | Spike     | LCS       | LCS       | Unit | D | %Rec | %Rec.    | Limits |  |
|------------------------------|-----------|-----------|-----------|------|---|------|----------|--------|--|
|                              | Added     | Result    | Qualifier |      |   |      |          |        |  |
| Chloromethane                | 10.0      | 8.33      |           | ug/L |   | 83   | 44 - 126 |        |  |
| cis-1,2-Dichloroethene       | 10.0      | 8.35      |           | ug/L |   | 83   | 80 - 120 |        |  |
| cis-1,3-Dichloropropene      | 10.0      | 8.86      |           | ug/L |   | 89   | 61 - 120 |        |  |
| Dibromochloromethane         | 10.0      | 9.65      |           | ug/L |   | 97   | 64 - 120 |        |  |
| Dibromomethane               | 10.0      | 8.71      |           | ug/L |   | 87   | 80 - 120 |        |  |
| Dichlorodifluoromethane      | 10.0      | 7.72      |           | ug/L |   | 77   | 19 - 129 |        |  |
| Ethyl methacrylate           | 10.0      | 10.2      |           | ug/L |   | 102  | 40 - 160 |        |  |
| Ethylbenzene                 | 10.0      | 9.73      |           | ug/L |   | 97   | 80 - 120 |        |  |
| Ethylene Dibromide           | 10.0      | 9.63      |           | ug/L |   | 96   | 79 - 120 |        |  |
| Iodomethane                  | 10.0      | 8.61      |           | ug/L |   | 86   | 72 - 141 |        |  |
| Isobutanol                   | 250       | 162       |           | ug/L |   | 65   | 40 - 160 |        |  |
| Methylene Chloride           | 10.0      | 7.86      |           | ug/L |   | 79   | 66 - 131 |        |  |
| m-Xylene & p-Xylene          | 10.0      | 9.48      |           | ug/L |   | 95   | 80 - 120 |        |  |
| o-Xylene                     | 10.0      | 9.52      |           | ug/L |   | 95   | 80 - 120 |        |  |
| Styrene                      | 10.0      | 9.47      |           | ug/L |   | 95   | 79 - 120 |        |  |
| Tetrachloroethene            | 10.0      | 9.78      |           | ug/L |   | 98   | 79 - 120 |        |  |
| Toluene                      | 10.0      | 9.69      |           | ug/L |   | 97   | 80 - 120 |        |  |
| trans-1,2-Dichloroethene     | 10.0      | 8.61      |           | ug/L |   | 86   | 80 - 120 |        |  |
| trans-1,3-Dichloropropene    | 10.0      | 9.42      |           | ug/L |   | 94   | 58 - 120 |        |  |
| trans-1,4-Dichloro-2-butene  | 10.0      | 7.28      |           | ug/L |   | 73   | 10 - 199 |        |  |
| Trichloroethene              | 10.0      | 8.73      |           | ug/L |   | 87   | 76 - 120 |        |  |
| Trichlorofluoromethane       | 10.0      | 9.97      |           | ug/L |   | 100  | 49 - 157 |        |  |
| Vinyl acetate                | 10.0      | 6.16      |           | ug/L |   | 62   | 46 - 161 |        |  |
| Vinyl chloride               | 10.0      | 7.98      |           | ug/L |   | 80   | 53 - 127 |        |  |
| Xylenes, Total               | 20.0      | 19.0      |           | ug/L |   | 95   | 80 - 120 |        |  |
| <hr/>                        |           |           |           |      |   |      |          |        |  |
| Surrogate                    | LCS       | LCS       | Limits    |      |   |      |          |        |  |
|                              | %Recovery | Qualifier |           |      |   |      |          |        |  |
| 1,2-Dichloroethane-d4 (Surr) | 89        |           | 63 - 129  |      |   |      |          |        |  |
| 4-Bromofluorobenzene (Surr)  | 105       |           | 66 - 120  |      |   |      |          |        |  |
| Dibromofluoromethane (Surr)  | 90        |           | 75 - 121  |      |   |      |          |        |  |
| Toluene-d8 (Surr)            | 103       |           | 74 - 120  |      |   |      |          |        |  |

**Lab Sample ID: MB 240-183189/6**

**Matrix: Water**

**Analysis Batch: 183189**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

| Analyte                     | MB     | MB        | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
|                             | Result | Qualifier |     |      |      |   |          |                |         |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 1.0 | 0.28 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.22 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.24 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.30 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.45 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,2,3-Trichloropropane      | ND     |           | 1.0 | 0.44 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,2-Dibromo-3-Chloropropane | ND     |           | 2.0 | 0.82 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.23 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,2-Dichloroethene, Total   | ND     |           | 2.0 | 0.20 | ug/L |   |          | 06/02/15 00:36 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.25 | ug/L |   |          | 06/02/15 00:36 | 1       |

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-183189/6**

**Matrix: Water**

**Analysis Batch: 183189**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

| Analyte                     | MB | MB | Result | Qualifier | RL  | MDL  | Unit | D | Prepared       | Analyzed | Dil Fac |
|-----------------------------|----|----|--------|-----------|-----|------|------|---|----------------|----------|---------|
|                             |    |    |        |           |     |      |      |   |                |          |         |
| 1,4-Dioxane                 | ND |    | ND     |           | 50  | 40   | ug/L |   | 06/02/15 00:36 |          | 1       |
| 2-Butanone                  | ND |    | ND     |           | 10  | 0.53 | ug/L |   | 06/02/15 00:36 |          | 1       |
| 2-Hexanone                  | ND |    | ND     |           | 10  | 0.48 | ug/L |   | 06/02/15 00:36 |          | 1       |
| 3-Chloro-1-propene          | ND |    | ND     |           | 2.0 | 0.84 | ug/L |   | 06/02/15 00:36 |          | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND |    | ND     |           | 10  | 0.99 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Acetone                     | ND |    | ND     |           | 10  | 0.94 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Acetonitrile                | ND |    | ND     |           | 20  | 4.0  | ug/L |   | 06/02/15 00:36 |          | 1       |
| Acrolein                    | ND |    | ND     |           | 20  | 4.5  | ug/L |   | 06/02/15 00:36 |          | 1       |
| Acrylonitrile               | ND |    | ND     |           | 20  | 6.3  | ug/L |   | 06/02/15 00:36 |          | 1       |
| Benzene                     | ND |    | ND     |           | 1.0 | 0.35 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Bromodichloromethane        | ND |    | ND     |           | 1.0 | 0.29 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Bromoform                   | ND |    | ND     |           | 1.0 | 0.56 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Bromomethane                | ND |    | ND     |           | 1.0 | 0.44 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Carbon disulfide            | ND |    | ND     |           | 1.0 | 0.38 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Carbon tetrachloride        | ND |    | ND     |           | 1.0 | 0.43 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Chlorobenzene               | ND |    | ND     |           | 1.0 | 0.25 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Chloroethane                | ND |    | ND     |           | 1.0 | 0.32 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Chloroform                  | ND |    | ND     |           | 1.0 | 0.25 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Chloromethane               | ND |    | ND     |           | 1.0 | 0.44 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Chloroprene                 | ND |    | ND     |           | 2.0 | 0.26 | ug/L |   | 06/02/15 00:36 |          | 1       |
| cis-1,2-Dichloroethene      | ND |    | ND     |           | 1.0 | 0.26 | ug/L |   | 06/02/15 00:36 |          | 1       |
| cis-1,3-Dichloropropene     | ND |    | ND     |           | 1.0 | 0.46 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Dibromochloromethane        | ND |    | ND     |           | 1.0 | 0.43 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Dibromomethane              | ND |    | ND     |           | 1.0 | 0.42 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Dichlorodifluoromethane     | ND |    | ND     |           | 1.0 | 0.32 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Ethyl methacrylate          | ND |    | ND     |           | 1.0 | 0.44 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Ethylbenzene                | ND |    | ND     |           | 1.0 | 0.25 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Ethylene Dibromide          | ND |    | ND     |           | 1.0 | 0.32 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Iodomethane                 | ND |    | ND     |           | 1.0 | 0.42 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Isobutanol                  | ND |    | ND     |           | 50  | 12   | ug/L |   | 06/02/15 00:36 |          | 1       |
| Methacrylonitrile           | ND |    | ND     |           | 10  | 2.5  | ug/L |   | 06/02/15 00:36 |          | 1       |
| Methyl methacrylate         | ND |    | ND     |           | 2.0 | 0.28 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Methylene Chloride          | ND |    | ND     |           | 1.0 | 0.33 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Propionitrile               | ND |    | ND     |           | 10  | 2.0  | ug/L |   | 06/02/15 00:36 |          | 1       |
| Styrene                     | ND |    | ND     |           | 1.0 | 0.45 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Tetrachloroethene           | ND |    | ND     |           | 1.0 | 0.31 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Toluene                     | ND |    | ND     |           | 1.0 | 0.23 | ug/L |   | 06/02/15 00:36 |          | 1       |
| trans-1,2-Dichloroethene    | ND |    | ND     |           | 1.0 | 0.30 | ug/L |   | 06/02/15 00:36 |          | 1       |
| trans-1,3-Dichloropropene   | ND |    | ND     |           | 1.0 | 0.56 | ug/L |   | 06/02/15 00:36 |          | 1       |
| trans-1,4-Dichloro-2-butene | ND |    | ND     |           | 1.0 | 0.55 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Trichloroethene             | ND |    | ND     |           | 1.0 | 0.22 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Trichlorofluoromethane      | ND |    | ND     |           | 1.0 | 0.49 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Vinyl acetate               | ND |    | ND     |           | 2.0 | 0.41 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Vinyl chloride              | ND |    | ND     |           | 1.0 | 0.29 | ug/L |   | 06/02/15 00:36 |          | 1       |
| Xylenes, Total              | ND |    | ND     |           | 2.0 | 0.52 | ug/L |   | 06/02/15 00:36 |          | 1       |

| Surrogate                    | MB | MB | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|----|----|-----------|-----------|----------|----------|----------------|---------|
|                              |    |    |           |           |          |          |                |         |
| 1,2-Dichloroethane-d4 (Surr) |    |    | 103       |           | 63 - 129 |          | 06/02/15 00:36 | 1       |

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-183189/6**

**Matrix: Water**

**Analysis Batch: 183189**

| Surrogate                   | MB | MB | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|----|----|-----------|-----------|----------|----------|----------------|---------|
|                             |    |    |           |           |          |          |                |         |
| 4-Bromofluorobenzene (Surr) |    | 88 |           |           | 66 - 120 |          | 06/02/15 00:36 | 1       |
| Dibromofluoromethane (Surr) |    | 98 |           |           | 75 - 121 |          | 06/02/15 00:36 | 1       |
| Toluene-d8 (Surr)           |    | 96 |           |           | 74 - 120 |          | 06/02/15 00:36 | 1       |

**Lab Sample ID: LCS 240-183189/4**

**Matrix: Water**

**Analysis Batch: 183189**

| Analyte                     | Spike Added | LCS    | LCS       | Unit | D | %Rec | %Rec.    | Limits |
|-----------------------------|-------------|--------|-----------|------|---|------|----------|--------|
|                             |             | Result | Qualifier |      |   |      |          |        |
| 1,1,1,2-Tetrachloroethane   | 10.0        | 10.6   |           | ug/L |   | 106  | 72 - 120 |        |
| 1,1,1-Trichloroethane       | 10.0        | 10.1   |           | ug/L |   | 101  | 74 - 120 |        |
| 1,1,2,2-Tetrachloroethane   | 10.0        | 10.2   |           | ug/L |   | 102  | 68 - 120 |        |
| 1,1,2-Trichloroethane       | 10.0        | 10.4   |           | ug/L |   | 104  | 80 - 120 |        |
| 1,1-Dichloroethane          | 10.0        | 10.8   |           | ug/L |   | 108  | 80 - 120 |        |
| 1,1-Dichloroethene          | 10.0        | 9.47   |           | ug/L |   | 95   | 78 - 131 |        |
| 1,2,3-Trichloropropane      | 10.0        | 10.5   |           | ug/L |   | 105  | 73 - 129 |        |
| 1,2-Dibromo-3-Chloropropane | 10.0        | 9.89   |           | ug/L |   | 99   | 42 - 136 |        |
| 1,2-Dichloroethane          | 10.0        | 10.7   |           | ug/L |   | 107  | 71 - 127 |        |
| 1,2-Dichloroethene, Total   | 20.0        | 20.6   |           | ug/L |   | 103  | 80 - 120 |        |
| 1,2-Dichloropropane         | 10.0        | 10.4   |           | ug/L |   | 104  | 80 - 120 |        |
| 1,4-Dioxane                 | 200         | 189    |           | ug/L |   | 94   | 50 - 150 |        |
| 2-Butanone                  | 20.0        | 20.3   |           | ug/L |   | 101  | 60 - 126 |        |
| 2-Hexanone                  | 20.0        | 20.9   |           | ug/L |   | 105  | 55 - 133 |        |
| 3-Chloro-1-propene          | 10.0        | 9.44   |           | ug/L |   | 94   | 40 - 160 |        |
| 4-Methyl-2-pentanone (MIBK) | 20.0        | 22.1   |           | ug/L |   | 110  | 63 - 128 |        |
| Acetone                     | 20.0        | 18.5   |           | ug/L |   | 93   | 43 - 136 |        |
| Acrolein                    | 50.0        | 58.4   |           | ug/L |   | 117  | 51 - 170 |        |
| Acrylonitrile               | 100         | 105    |           | ug/L |   | 105  | 66 - 132 |        |
| Benzene                     | 10.0        | 10.2   |           | ug/L |   | 102  | 80 - 120 |        |
| Bromodichloromethane        | 10.0        | 10.6   |           | ug/L |   | 106  | 72 - 121 |        |
| Bromoform                   | 10.0        | 8.97   |           | ug/L |   | 90   | 40 - 131 |        |
| Bromomethane                | 10.0        | 9.47   |           | ug/L |   | 95   | 11 - 185 |        |
| Carbon disulfide            | 10.0        | 10.3   |           | ug/L |   | 103  | 62 - 142 |        |
| Carbon tetrachloride        | 10.0        | 10.1   |           | ug/L |   | 101  | 66 - 128 |        |
| Chlorobenzene               | 10.0        | 9.78   |           | ug/L |   | 98   | 80 - 120 |        |
| Chloroethane                | 10.0        | 8.23   |           | ug/L |   | 82   | 25 - 153 |        |
| Chloroform                  | 10.0        | 10.7   |           | ug/L |   | 107  | 79 - 120 |        |
| Chloromethane               | 10.0        | 8.35   |           | ug/L |   | 83   | 44 - 126 |        |
| cis-1,2-Dichloroethene      | 10.0        | 10.6   |           | ug/L |   | 106  | 80 - 120 |        |
| cis-1,3-Dichloropropene     | 10.0        | 9.36   |           | ug/L |   | 94   | 61 - 120 |        |
| Dibromochloromethane        | 10.0        | 9.35   |           | ug/L |   | 94   | 64 - 120 |        |
| Dibromomethane              | 10.0        | 11.0   |           | ug/L |   | 110  | 80 - 120 |        |
| Dichlorodifluoromethane     | 10.0        | 5.62   |           | ug/L |   | 56   | 19 - 129 |        |
| Ethyl methacrylate          | 10.0        | 9.79   |           | ug/L |   | 98   | 40 - 160 |        |
| Ethylbenzene                | 10.0        | 9.85   |           | ug/L |   | 98   | 80 - 120 |        |
| Ethylene Dibromide          | 10.0        | 10.5   |           | ug/L |   | 105  | 79 - 120 |        |
| Iodomethane                 | 10.0        | 10.8   |           | ug/L |   | 108  | 72 - 141 |        |
| Isobutanol                  | 250         | 257    |           | ug/L |   | 103  | 40 - 160 |        |

TestAmerica Canton

# QC Sample Results

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-183189/4**

**Matrix: Water**

**Analysis Batch: 183189**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

| Analyte                     | Spike | LCS    | LCS       | Unit | D | %Rec | %Rec.    |
|-----------------------------|-------|--------|-----------|------|---|------|----------|
|                             | Added | Result | Qualifier |      |   |      |          |
| Methylene Chloride          | 10.0  | 10.8   |           | ug/L |   | 108  | 66 - 131 |
| m-Xylene & p-Xylene         | 10.0  | 9.91   |           | ug/L |   | 99   | 80 - 120 |
| o-Xylene                    | 10.0  | 10.2   |           | ug/L |   | 102  | 80 - 120 |
| Styrene                     | 10.0  | 9.06   |           | ug/L |   | 91   | 79 - 120 |
| Tetrachloroethene           | 10.0  | 9.45   |           | ug/L |   | 94   | 79 - 120 |
| Toluene                     | 10.0  | 10.3   |           | ug/L |   | 103  | 80 - 120 |
| trans-1,2-Dichloroethene    | 10.0  | 10.0   |           | ug/L |   | 100  | 80 - 120 |
| trans-1,3-Dichloropropene   | 10.0  | 10.1   |           | ug/L |   | 101  | 58 - 120 |
| trans-1,4-Dichloro-2-butene | 10.0  | 7.88   |           | ug/L |   | 79   | 10 - 199 |
| Trichloroethene             | 10.0  | 9.74   |           | ug/L |   | 97   | 76 - 120 |
| Trichlorofluoromethane      | 10.0  | 7.35   |           | ug/L |   | 73   | 49 - 157 |
| Vinyl acetate               | 10.0  | 11.2   |           | ug/L |   | 112  | 46 - 161 |
| Vinyl chloride              | 10.0  | 7.48   |           | ug/L |   | 75   | 53 - 127 |
| Xylenes, Total              | 20.0  | 20.1   |           | ug/L |   | 101  | 80 - 120 |

| Surrogate                    | LCS       | LCS       | Limits   |
|------------------------------|-----------|-----------|----------|
|                              | %Recovery | Qualifier |          |
| 1,2-Dichloroethane-d4 (Surr) | 96        |           | 63 - 129 |
| 4-Bromofluorobenzene (Surr)  | 96        |           | 66 - 120 |
| Dibromofluoromethane (Surr)  | 95        |           | 75 - 121 |
| Toluene-d8 (Surr)            | 98        |           | 74 - 120 |

## Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-182323/5**

**Matrix: Water**

**Analysis Batch: 182323**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

| Analyte                      | MB        | MB        | RL       | MDL      | Unit     | D       | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------|---------|----------|----------------|---------|
|                              | Result    | Qualifier |          |          |          |         |          |                |         |
| 1,4-Dioxane                  | ND        |           | 2.0      | 0.44     | ug/L     |         |          | 05/26/15 12:17 | 1       |
| Surrogate                    | MB        | MB        | Limits   | Prepared | Analyzed | Dil Fac | Prepared | Analyzed       | Dil Fac |
|                              | %Recovery | Qualifier |          |          |          |         |          |                |         |
| 1,2-Dichloroethane-d4 (Surr) | 99        |           | 74 - 120 |          |          |         |          | 05/26/15 12:17 | 1       |

**Lab Sample ID: LCS 240-182323/4**

**Matrix: Water**

**Analysis Batch: 182323**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

| Analyte                      | Spike     | LCS       | LCS       | Unit     | D        | %Rec    | %Rec.    |                |         |
|------------------------------|-----------|-----------|-----------|----------|----------|---------|----------|----------------|---------|
|                              | Added     | Result    | Qualifier |          |          |         |          |                |         |
| 1,4-Dioxane                  | 10.0      | 9.81      |           | ug/L     |          | 98      | 59 - 124 |                |         |
| Surrogate                    | LCS       | LCS       | Limits    | Prepared | Analyzed | Dil Fac | Prepared | Analyzed       | Dil Fac |
|                              | %Recovery | Qualifier |           |          |          |         |          |                |         |
| 1,2-Dichloroethane-d4 (Surr) | 100       |           | 74 - 120  |          |          |         |          | 05/26/15 12:17 | 1       |

# QC Association Summary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## GC/MS VOA

### Analysis Batch: 182323

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method    | Prep Batch |
|------------------|--------------------|-----------|--------|-----------|------------|
| 240-51070-1      | EFFLUENT/052115    | Total/NA  | Water  | 8260B SIM |            |
| LCS 240-182323/4 | Lab Control Sample | Total/NA  | Water  | 8260B SIM |            |
| MB 240-182323/5  | Method Blank       | Total/NA  | Water  | 8260B SIM |            |

### Analysis Batch: 182892

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 240-51070-2      | TB01/052115        | Total/NA  | Water  | 8260B  |            |
| LCS 240-182892/4 | Lab Control Sample | Total/NA  | Water  | 8260B  |            |
| MB 240-182892/6  | Method Blank       | Total/NA  | Water  | 8260B  |            |

### Analysis Batch: 183189

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 240-51070-1      | EFFLUENT/052115    | Total/NA  | Water  | 8260B  |            |
| LCS 240-183189/4 | Lab Control Sample | Total/NA  | Water  | 8260B  |            |
| MB 240-183189/6  | Method Blank       | Total/NA  | Water  | 8260B  |            |

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# Lab Chronicle

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

**Client Sample ID: EFFLUENT/052115**

**Date Collected: 05/21/15 10:05**

**Date Received: 05/22/15 08:50**

**Lab Sample ID: 240-51070-1**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260B        |     | 1               | 183189       | 06/02/15 02:28       | RJQ     | TAL CAN |
| Total/NA  | Analysis   | 8260B SIM    |     | 1               | 182323       | 05/26/15 19:28       | SAM     | TAL CAN |

**Client Sample ID: TB01/052115**

**Date Collected: 05/21/15 00:00**

**Date Received: 05/22/15 08:50**

**Lab Sample ID: 240-51070-2**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260B        |     | 1               | 182892       | 05/29/15 19:39       | LRW     | TAL CAN |

## Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

# Certification Summary

Client: TRC Environmental Corp-Payne Firm  
Project/Site: EMD

TestAmerica Job ID: 240-51070-1

## Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority         | Program       | EPA Region | Certification ID | Expiration Date |
|-------------------|---------------|------------|------------------|-----------------|
| California        | NELAP         | 9          | 01144CA          | 06-30-14 *      |
| California        | State Program | 9          | 2927             | 04-30-17        |
| Connecticut       | State Program | 1          | PH-0590          | 12-31-15        |
| Florida           | NELAP         | 4          | E87225           | 06-30-15 *      |
| Georgia           | State Program | 4          | N/A              | 06-30-15 *      |
| Illinois          | NELAP         | 5          | 200004           | 07-31-15        |
| Kansas            | NELAP         | 7          | E-10336          | 05-31-15 *      |
| Kentucky (UST)    | State Program | 4          | 58               | 06-30-15 *      |
| Kentucky (WW)     | State Program | 4          | 98016            | 12-31-15        |
| L-A-B             | DoD ELAP      |            | L2315            | 07-18-16        |
| Minnesota         | NELAP         | 5          | 039-999-348      | 12-31-15        |
| Nevada            | State Program | 9          | OH-000482008A    | 07-31-15        |
| New Jersey        | NELAP         | 2          | OH001            | 06-30-15 *      |
| New York          | NELAP         | 2          | 10975            | 03-31-16 *      |
| Ohio VAP          | State Program | 5          | CL0024           | 10-31-15        |
| Oregon            | NELAP         | 10         | 4062             | 02-23-16        |
| Pennsylvania      | NELAP         | 3          | 68-00340         | 08-31-15        |
| Texas             | NELAP         | 6          |                  | 08-31-15        |
| USDA              | Federal       |            | P330-13-00319    | 11-26-16        |
| Virginia          | NELAP         | 3          | 460175           | 09-14-15        |
| Washington        | State Program | 10         | C971             | 01-12-16        |
| West Virginia DEP | State Program | 3          | 210              | 12-31-15        |
| Wisconsin         | State Program | 5          | 999518190        | 08-31-15        |

\* Certification renewal pending - certification considered valid.

TestAmerica Canton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY  
AND  
RECEIVING DOCUMENTS**



240-51070 Chain of Custody

***Chain of Custody Record***

# TestAmerica

*Drinking Water?* Yes  No

*Drinking Water? Yes*  *No*

STAL-4124 (1007)

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6/5/2015

**DISTRIBUTION:** *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica Canton Sample Receipt Form/Narrative  
Canton Facility

Login #: 5/22/15

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|--|--|--|
| Client _____   | Site Name _____  | Cooler unpacked by: <i>Spurkell</i>  |
| Cooler Received on <u>5/22/15</u> Opened on <u>5/22/15</u>   |  | FedEx: 1 <sup>st</sup> Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other |
| Receipt After-hours: Drop-off Date/Time _____  |  | Storage Location _____   |
| TestAmerica Cooler # _____   | Foam Box <input checked="" type="checkbox"/> Client Cooler <input checked="" type="checkbox"/> | Box <input type="checkbox"/> Other <input type="checkbox"/>                              |
| Packing material used: <input checked="" type="checkbox"/> Bubble Wrap <input type="checkbox"/> Foam <input type="checkbox"/> Plastic Bag <input type="checkbox"/> None <input type="checkbox"/> Other _____ |  |  |
| COOLANT: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> Water <input type="checkbox"/> None                         |  |  |
| 1. Cooler temperature upon receipt   |  |  |
| IR GUN# A (CF +4.0 °C)   | Observed Cooler Temp. _____ °C   | Corrected Cooler Temp. _____ °C  |
| IR GUN# 4 (CF +0.5 °C)   | Observed Cooler Temp. _____ °C   | Corrected Cooler Temp. _____ °C  |
| IR GUN# 5 (CF +0.4 °C)   | Observed Cooler Temp. _____ °C   | Corrected Cooler Temp. _____ °C  |
| IR GUN# 8 (CF -1.2 °C)   | Observed Cooler Temp. <u>2.4</u> °C  | Corrected Cooler Temp. <u>1.2</u> °C   |
| 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u>  |  |  |
| -Were custody seals on the outside of the cooler(s) signed & dated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| -Were custody seals on the bottle(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 3. Shippers' packing slip attached to the cooler(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |  |  |
| 4. Did custody papers accompany the sample(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |  |  |
| 5. Were the custody papers relinquished & signed in the appropriate place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |  |  |
| 6. Was/were the sampler(s) clearly identified on the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 7. Did all bottles arrive in good condition (Unbroken)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 8. Could all bottle labels be reconciled with the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |  |  |
| 9. Were correct bottle(s) used for the test(s) indicated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 10. Sufficient quantity received to perform indicated analyses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 11. Were sample(s) at the correct pH upon receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No NA pH Strip Lot# <u>HC432654</u>  |  |  |
| 12. Were VOAs on the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| 13. Were air bubbles >6 mm in any VOA vials? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No NA  |  |  |
| 14. Was a trip blank present in the cooler(s)? Trip Blank Lot # <u>B50001VR</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |  |  |
| Contacted PM _____   | Date _____   | by _____ via Verbal Voice Mail Other _____   |
| Concerning _____   |  | Samples processed by: _____  |

## 14. CHAIN OF CUSTODY &amp; SAMPLE DISCREPANCIES

Samples processed by: \_\_\_\_\_

## 15. SAMPLE CONDITION

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.

Sample(s) \_\_\_\_\_ were received in a broken container.

Sample(s) \_\_\_\_\_ were received with bubble &gt;6 mm in diameter. (Notify PM)

## 16. SAMPLE PRESERVATION

Sample(s) \_\_\_\_\_ were further preserved in the laboratory.

Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_